

AMENDMENTS TO THE CLAIMS:

Please cancel claim 14 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A structural sandwich plate member comprising:

first and second outer plates, said outer plates being made of metal and having a thickness greater than or equal to 3 mm;

a core of plastics or polymer material bonded to said outer plates with sufficient strength to transfer shear forces therebetween, said core having a thickness greater than or equal to 15 mm, wherein the plastics or polymer material forming said core is a compact thermoset material;
and

at least one interlayer within the core, said interlayer being generally parallel to the outer plates and having a higher tensile strength than the core material.

2. (Previously Presented) A structural sandwich plate member according to claim 1 wherein said interlayer comprises a metal layer.

3. (Original) A structural sandwich plate member according to claim 2 wherein said interlayer has a thickness in the range of from 50% to 150% of the thickness of one of said outer plates.

4. (Previously Presented) A structural sandwich plate member according to claim 1 wherein said interlayer comprises metal mesh.

5. (Original) A structural sandwich plate member according to claim 4 wherein said metal mesh is formed of expanded metal.

6. (Original) A structural sandwich plate member according to claim 1 wherein said interlayer comprises a high tensile strength fabric.

7. (Original) A structural sandwich plate member according to claim 1 wherein said interlayer comprises a hard ceramic plate.

8. (Previously Presented) A structural sandwich plate member according to claim 1 wherein said interlayer is corrugated, or dimpled or wave-formed.

9. (Previously Presented) A structural sandwich plate member according to claim 1 comprising a plurality of interlayers.

10. (Previously Presented) A structural sandwich plate member according to claim 1 wherein said interlayer is perforated.

11. (Previously Presented) A structural sandwich plate member according to claim 1 wherein said interlayer does not extend over the whole area of said plate member.

12-15. (Canceled)

16. (Currently Amended) A method of manufacturing a structural sandwich plate member comprising the steps of:

providing first and second outer plates made of metal and having a thickness greater than or equal to 3 mm in a spaced-apart relationship with at least one interlayer located therebetween and spaced from each of said outer metal plates;

injecting uncured plastics or polymer material to fill the space defined between said outer plates and either side of said interlayer, wherein the plastics or polymer material is a compact thermoset material; and

allowing said plastics or polymer material to cure to bond said outer plates together with sufficient strength to transfer shear forces therebetween;

wherein said interlayer has a higher tensile strength than the cured plastics or polymer material, and wherein the injecting step is practiced with sufficient material such that said plastics or polymer material bonded to said outer plates has a thickness greater than or equal to 15 mm.

17. (Original) A method according to claim 16 wherein said step of injecting is carried out from both sides of the plate, either simultaneously or in two stages.

18. (Previously Presented) A method according to claim 16 comprising the additional step of coating or impregnating the interlayer with plastics or polymer material prior to insertion into the cavity between the outer metal plates.